Capability Planning for Today and Tomorrow
Army Installation Status Report

Installation Status Report

Report Documentation Page

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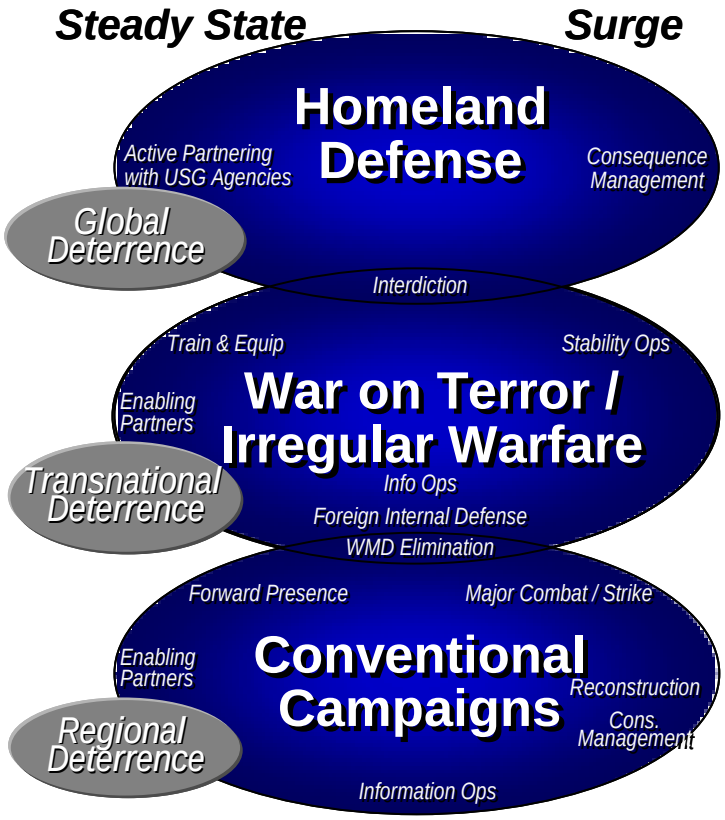
Current Environment



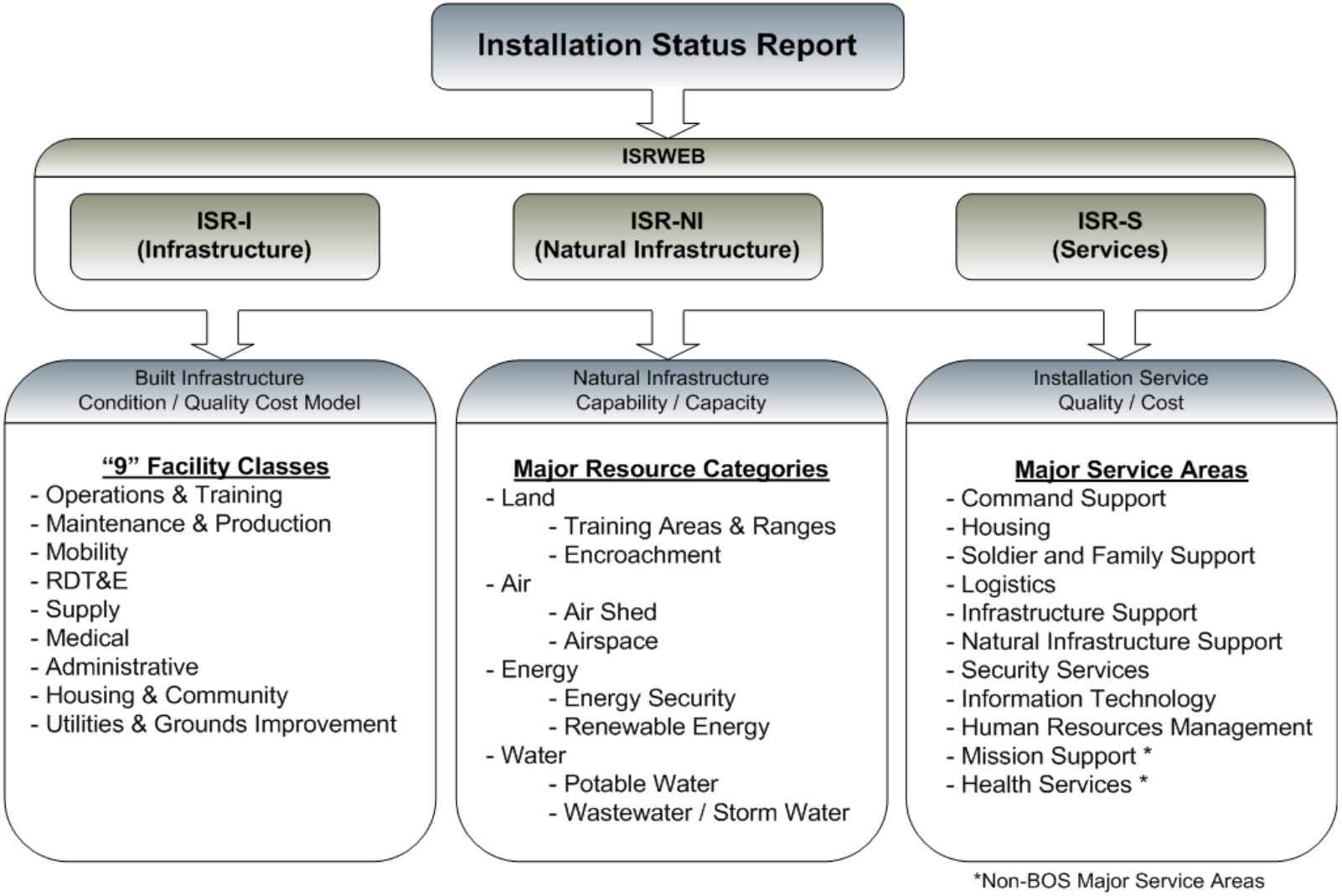
Sizing Variables:

Frequency Number Scale / Intensity
Concurrency Ops Risks Duration
Policy Environment Partner Capabilities

Current Environment

- Which installations can accept more mission?
- What are installation constraints today and in the future?
- Are our installations effectively utilizing resources and maximizing efficiencies (land, airspace, energy, water)?

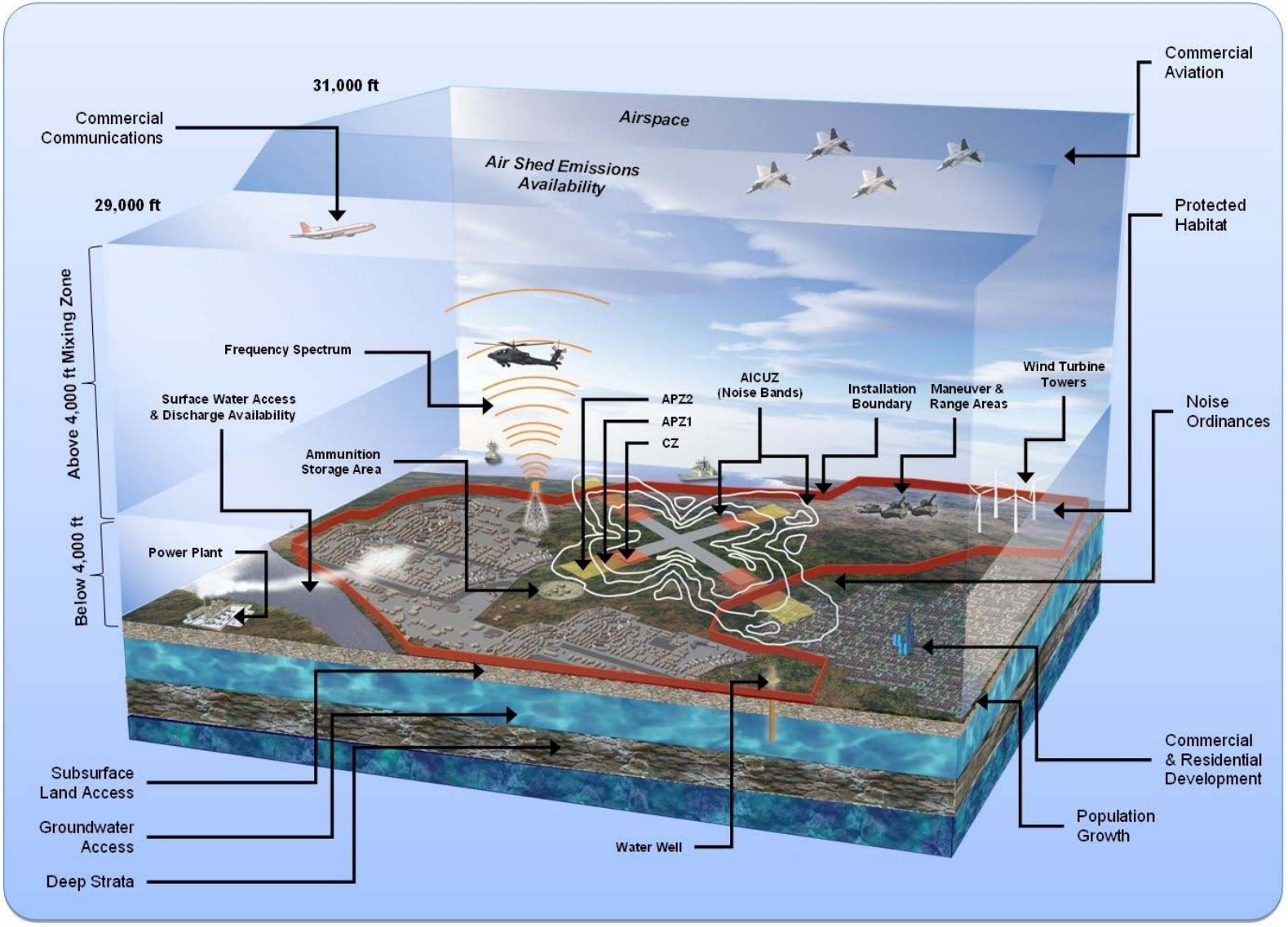
Components of ISR



What is ISR-NI?

- **ISR Natural Infrastructure (ISR-NI)** measures current and future installation capability
- Provides quantitative AND spatial analysis through an interactive GIS Viewer
- Ability to perform ‘what-if’ scenarios to provide visibility of mission impacts before they occur
- Consolidation of existing capability/ capacity data (e.g., training areas, energy, water, airspace) into an ‘early warning system

ISR-NI Focus


31,000 ft
Commercial Communications
Airspace
Air Shed Emissions Availability
29,000 ft
Commercial Aviation
Protected Habitat
Above 4,000 ft Mixing Zone
Below 4,000 ft
Frequency Spectrum
Surface Water Access & Discharge Availability
Ammunition Storage Area
Power Plant
APZ2
APZ1
CZ
AICUZ (Noise Bands)
Installation Boundary
Maneuver & Range Areas
Wind Turbine Towers
Noise Ordinances
Subsurface Land Access
Groundwater Access
Deep Strata
Water Well
Commercial & Residential Development
Population Growth

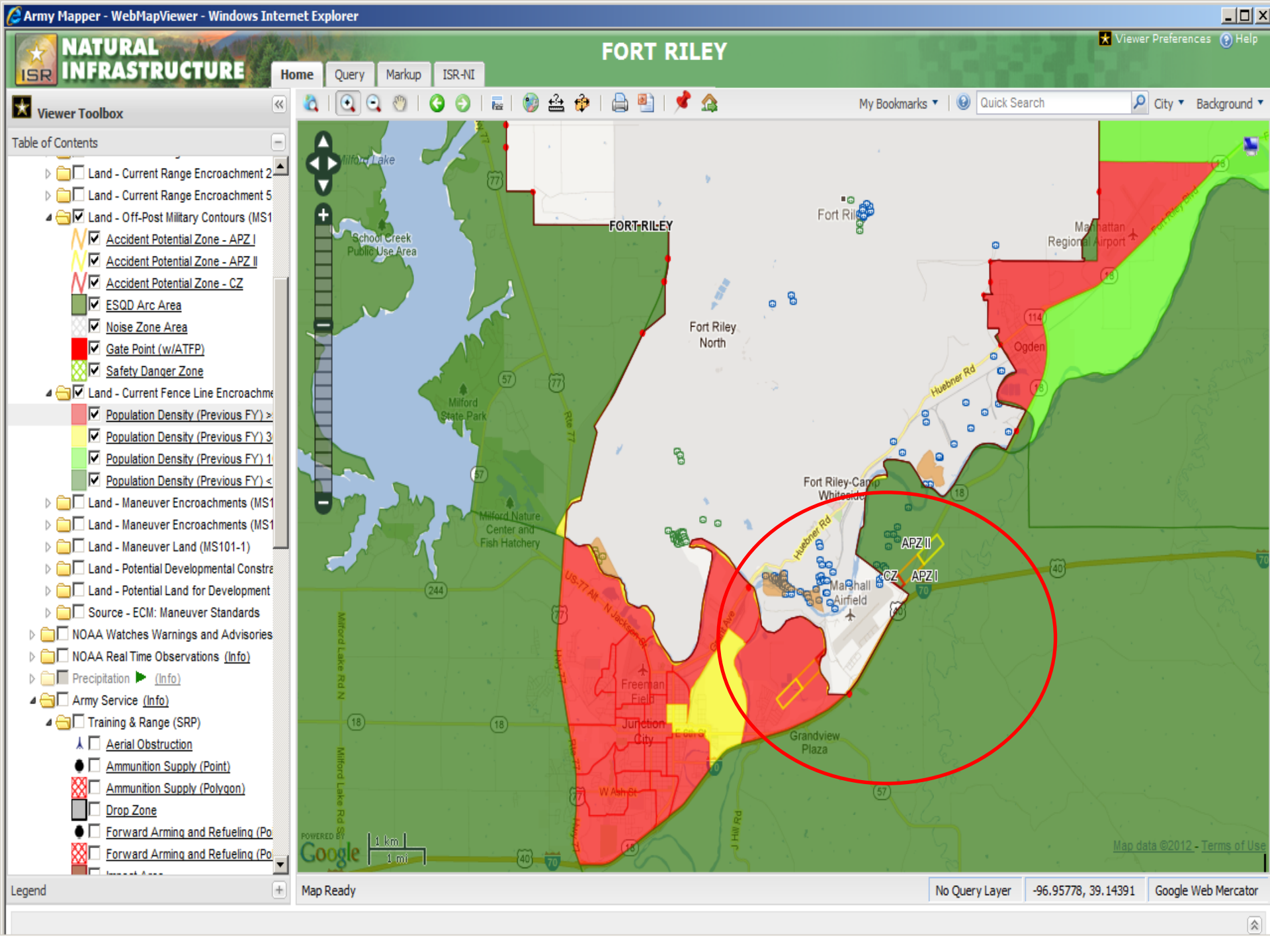
What is ISR-NI?

How are ISR-NI Data Utilized?

- **At the Installation Level:**
  - Data can be used to support prioritization of investments for critical projects
  - Capacity data can be used to support current/future missions
  - Provide coordinated response from across multiple garrison activities
- **At the Headquarters Level:**
  - Identify Army-wide installation capacities for realignment
  - Tracks progress made for sustainability initiatives
  - Identify areas for improvement
  - Provide ratings as part of the range evaluation in the G3 Sustainable Range Report
  - Provide data for IMCP metrics

What can ISR-NI tell you?

- Mission Impact to Training (Land, Airspace, Frequency)
  - Restrictions due to T&E species, CERCLA, wetlands, noise, air quality
  - External Encroachment due to sprawl, frequency
  - Camp Bullis, Ft. Belvoir
- Crash Zone / Accident Potential Zone Encroachment that go off post (Oceana)


Army Mapper - WebMapViewer - Windows Internet Explorer
NATURAL INFRASTRUCTURE
ISR
FORT RILEY
Viewer Preferences
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ISR-NI
Viewer Toolbox
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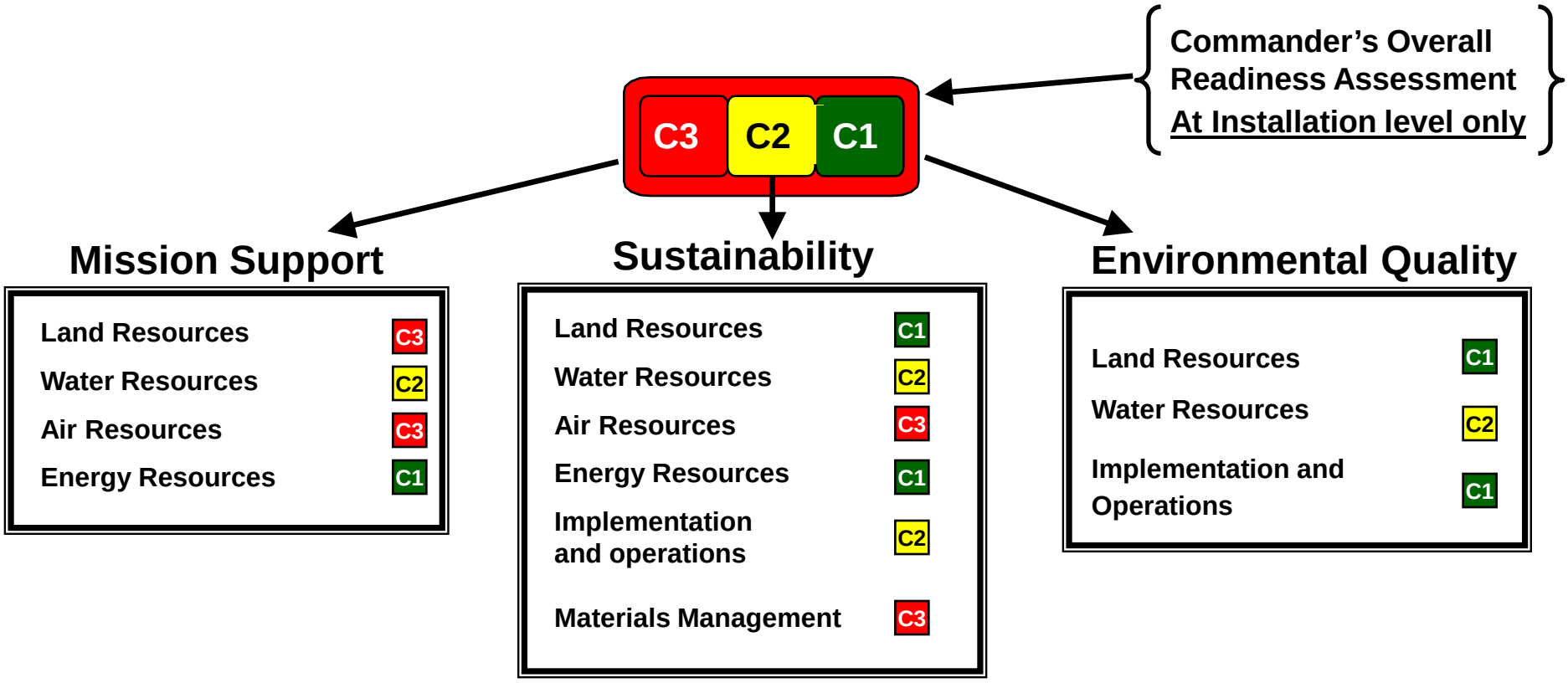
Land - Current Range Encroachment 5
Land - Off-Post Military Contours (MS1
Accident Potential Zone - APZ I
Accident Potential Zone - APZ II
Accident Potential Zone - CZ
ESQD Arc Area
Noise Zone Area
Gate Point (w/ATFP)
Safety Danger Zone
Land - Current Fence Line Encroachme
Population Density (Previous FY) >
Population Density (Previous FY) 3
Population Density (Previous FY) 1
Population Density (Previous FY) <
Land - Maneuver Encroachments (MS1
Land - Maneuver Encroachments (MS1
Land - Maneuver Land (MS101-1)
Land - Potential Developmental Constra
Land - Potential Land for Development
Source - ECM: Maneuver Standards
NOAA Watches Warnings and Advisories
NOAA Real Time Observations (Info)
Precipitation (Info)
Army Service (Info)
Training & Range (SRP)
Aerial Obstruction
Ammunition Supply (Point)
Ammunition Supply (Polygon)
Drop Zone
Forward Arming and Refueling (Po
Forward Arming and Refueling (Po
Legend
Milford Lake
School Creek Public Use Area
FORT RILEY
Fort Ri
Fort Riley North
Manhattan Regional Airport
Ogden
Huebner Rd
Milford State Park
Milford Nature Center and Fish Hatchery
Fort Riley-Camp Whiteside
APZ II
CZ
APZ I
Marshall Airfield
Freeman Field
Junction City
Grandview Plaza
Milford Lake Rd N
Milford Lake Rd S
Rte 77
US-77 Alt
N Jackson St
W Ash St
J Hw Rd
1 km
1 mi
Google
Map data ©2012 - Terms of Use
Map Ready
No Query Layer
-96.95778, 39.14391
Google Web Mercator

What can ISR-NI tell you?

- Macro level look at Over utilized / Underutilized Capacities
  - Utility (electrical, natural gas, and water)
- Status of actionable sustainability initiatives and milestones

ISR-NI Framework



Current Platform Readiness

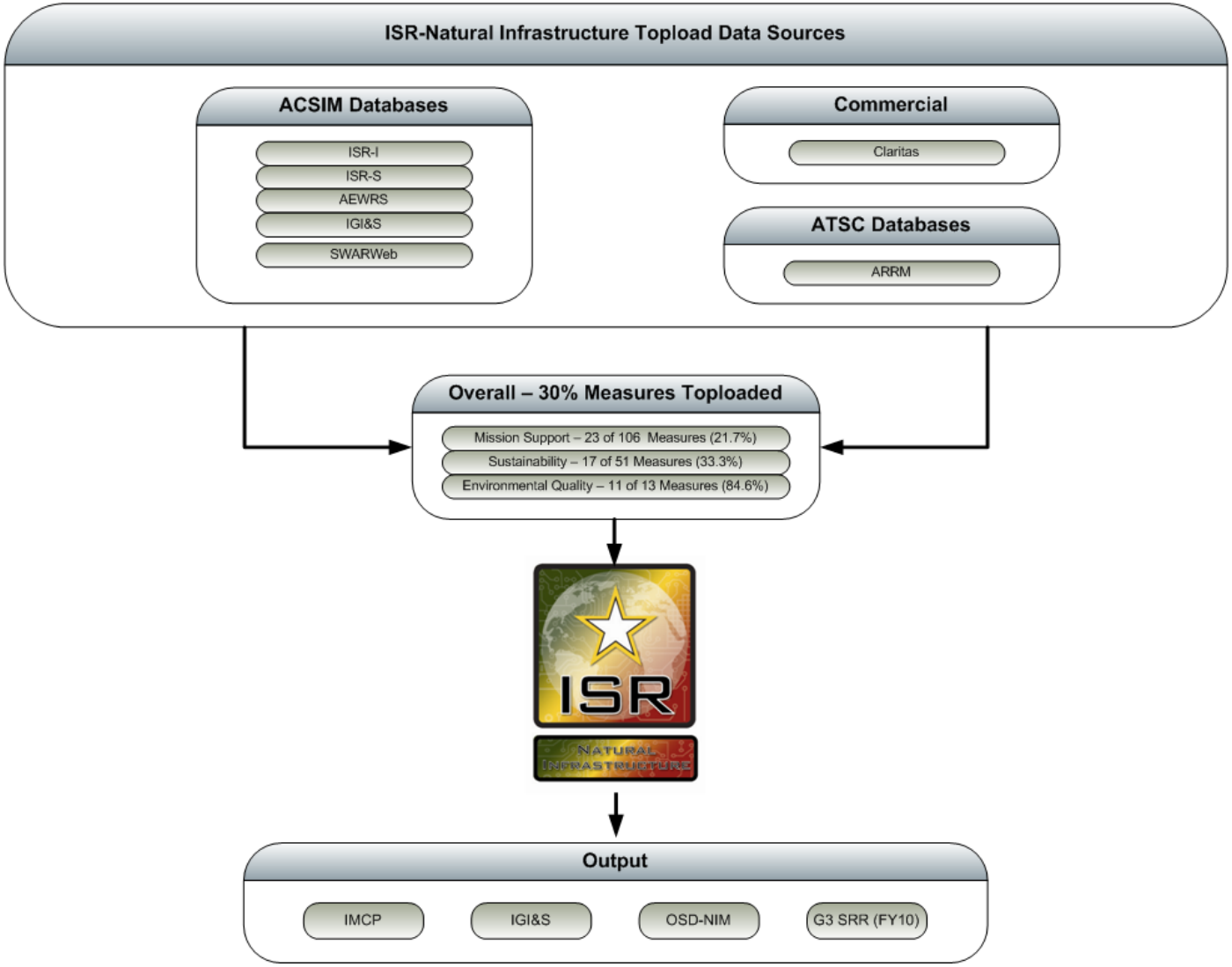
Future Platform Readiness

Environmental Status

ISR-NI Data Requirements

- ISR-NI determines natural asset capability via Performance Measures
  - ISR-NI Measures
    - 170 performance measures for NonVirtual Organizations
    - 86 performance measures for Virtual Organizations
- Auto-populate from existing feeder systems (data consistency)
- Installation data within system persists from year to year, validate and update each cycle
- Rating criteria aligns with Army standards

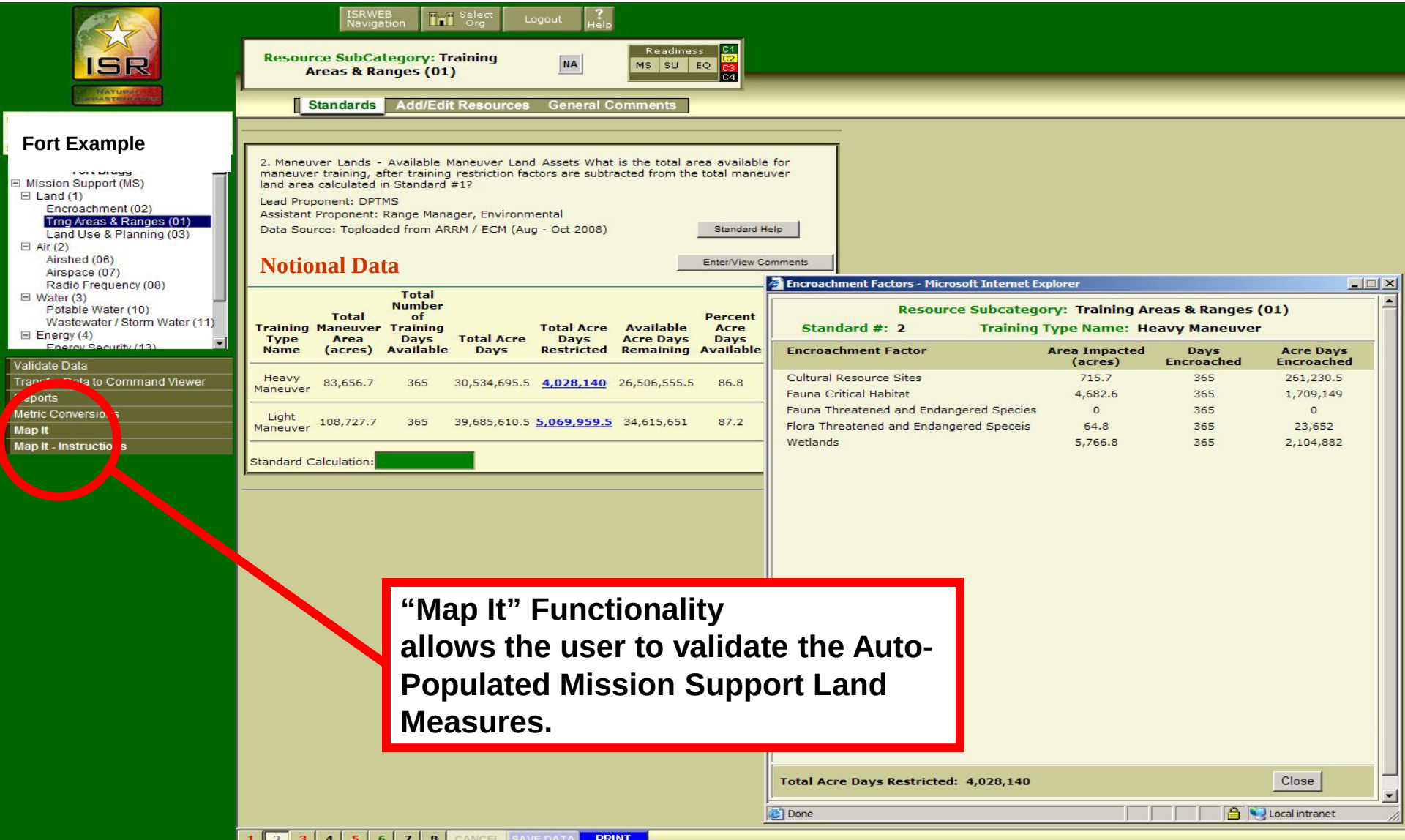
ISR-NI Connection to Army Databases



FY11 Training Areas and Ranges (MS101)

- Shortfall of maneuver training land on majority of installations due to increase in doctrinal requirements
- 25% of installations have issues that can significantly impact training in the next 5 years. Examples include:
  - Training Land Shortage
  - Threatened and Endangered Species
  - Environmental Issues
  - Water Shortage

ISR-NI Data Input Module



“Map It” Functionality allows the user to validate the Auto-Populated Mission Support Land Measures.

NATURAL INFRASTRUCTURE

ISR

UNDEFINED

Home | Query | Markup | ISR-NI

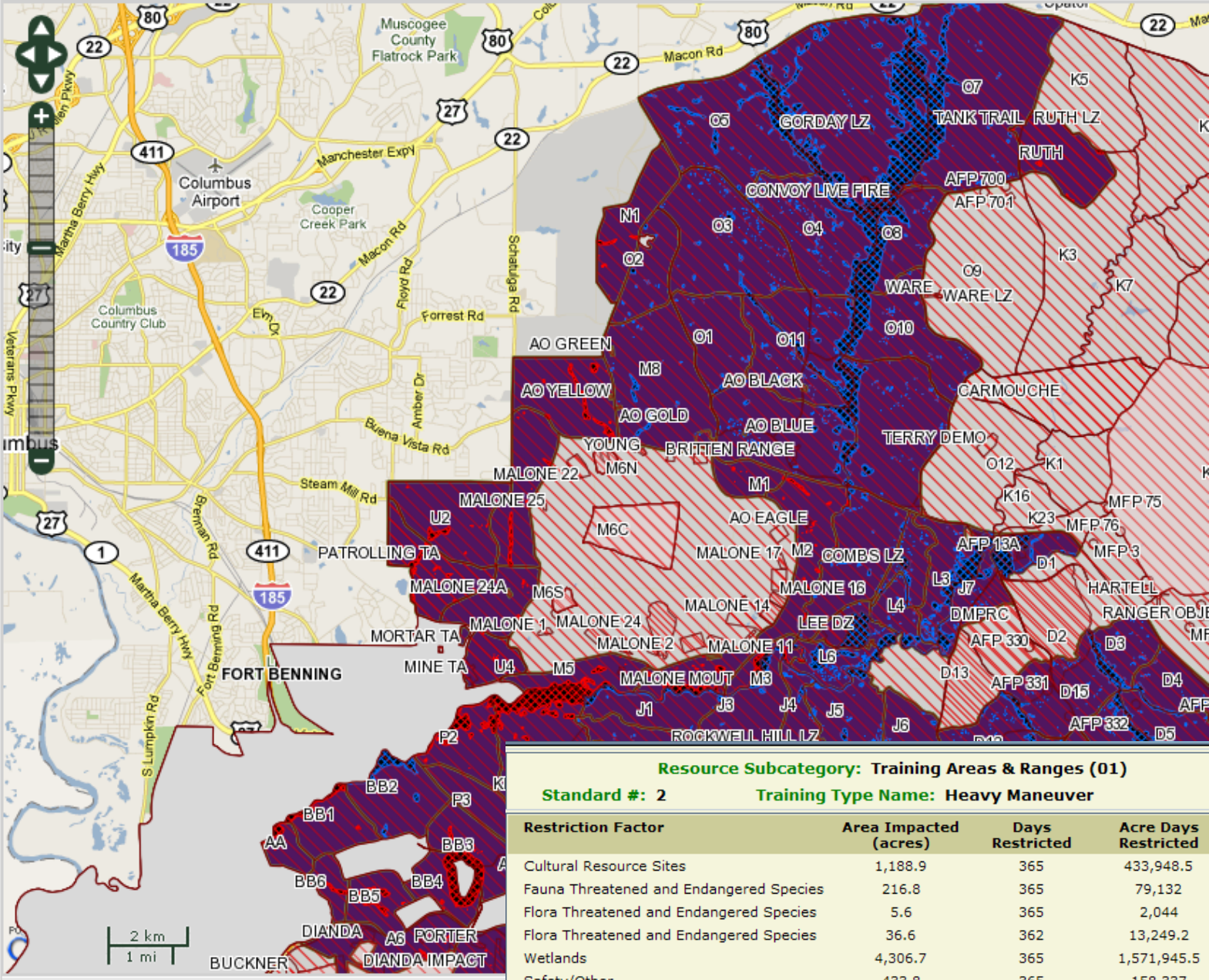
Viewer Toolbox

Table of Contents

- Renewable Ene
- Base Data
  - Installation E
  - Non-Operat
  - Live Fire Ra
  - Dudded Imp
- Land - Future F
- Land - Future R
- Land - Future R
- Land - Current
- Land - Current
- Land - Off-Post
- Land - Current
- Land - Maneuve
  - HM 001
  - HM 029
  - HM 039
  - HM 090
  - HM 092
  - HM 100
  - HM 107
  - HM 134
  - HM 138
  - HM 152
  - HM 165
  - HM 167
  - HM 183
  - HM 240
  - HM 273
  - HM 303
  - HM 362
  - HM 365
- Land - Maneuve
- Land - Maneuve
- Land - Potential

Legend

Select one or more overlays:



Resource Subcategory: Training Areas & Ranges (01)

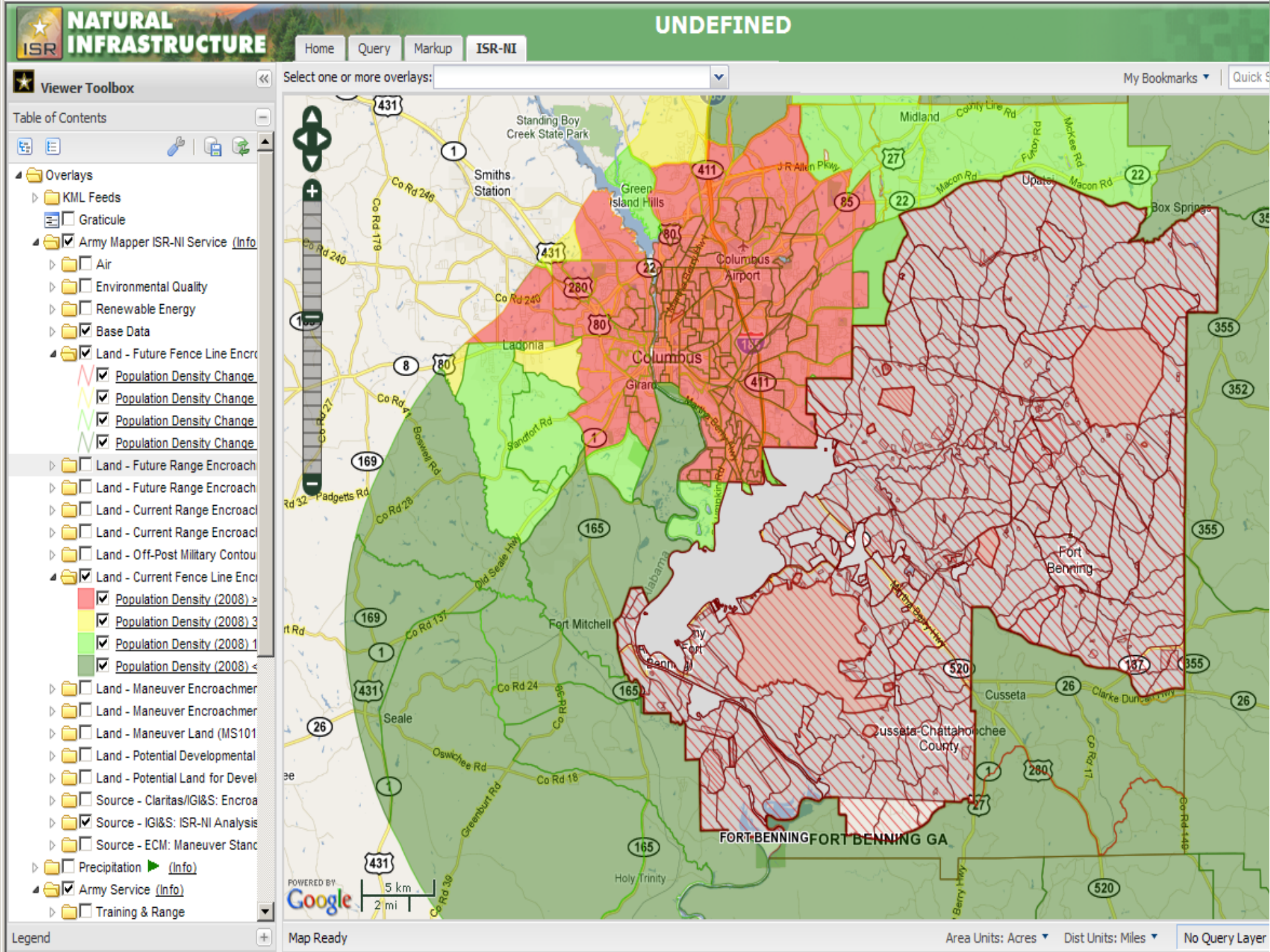
Standard #: 2 **Training Type Name:** Heavy Maneuver

Restriction Factor	Area Impacted (acres)	Days Restricted	Acre Days Restricted
Cultural Resource Sites	1,188.9	365	433,948.5
Fauna Threatened and Endangered Species	216.8	365	79,132
Flora Threatened and Endangered Species	5.6	365	2,044
Flora Threatened and Endangered Species	36.6	362	13,249.2
Wetlands	4,306.7	365	1,571,945.5
Safety/Other	433.8	365	158,337

Map Ready

FY11 Fenceline Encroachment (MS102)

- 41% of installations have contours that go off-post
- 62 installations have approximately 2 million acres under administrative control for training if mitigation measures occurred
- Future Encroachment – 45% of installations estimated to have significant population growth outside the base boundary in the next five years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Base Data
Land - Future Fence Line Encro
Population Density Change
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Population Density Change
Land - Future Range Encroach
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Land - Current Range Encroacl
Land - Off-Post Military Contou
Land - Current Fence Line Encr
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Population Density (2008) <
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Land - Maneuver Encroachmer
Land - Maneuver Land (MS101
Land - Potential Developmental
Land - Potential Land for Devel
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Source - IGI&S: ISR-NI Analysis
Source - ECM: Maneuver Stanc
Precipitation (Info)
Army Service (Info)
Training & Range
Legend
Select one or more overlays:
My Bookmarks
Quick S
Standing Boy Creek State Park
Smiths Station
Green Island Hills
Midland
Upatoi
Box Springs
Columbus Airport
Columbus
Ladonia
Girard
Fort Benning
Fort Mitchell
Seale
Cusseta
Cusseta-Chattahoochee County
FORT BENNING
FORT BENNING GA
Holy Trinity
POWERED BY Google
5 km
2 mi
Map Ready
Area Units: Acres
Dist Units: Miles
No Query Layer

Installation Status Report

Way Ahead

- Facility Energy Profile

Numb e	Commo n or Spe c	Component Name	Selecti on	Element Name	Conducted by a asset User o	Green		Amber		Red		WEIGHT	E-
2	Common	Building Exterior-General	Amber	Building Exterior	U	Light colored exterior of stone or masonry or reflective color if metal. Well sealed with no obvious places for air leaks.	0	Any construction material with evidence of condensation damage on the exterior of the building indicating air leaks.	10	Wooden construction. Joints not sealed, holes exist for air leaks. Condensation, mold, mildew present.	0	10	E
3	Common	Building Exterior-Roof	Red	Roof Energy	U	White or light colored roof or known to have a solar reflective index number. Vegetated roof.	0	Rock covered roof.	0	Dark material of any kind.	10	10	E
4	Common	Building Exterior-Walls	Red	Building Envelope	U	The primary building is over 50% shaded, no evidence of mold, moisture damage, or mildew.	0	The primary building is less than 50% shaded. Some evidence of at least one of the following, mold, moisture damage, and mildew.	0	The primary building is not shaded. There is evidence of mold, moisture damage and mildew.	10	10	E
5	Common	Building Exterior-Windows	Green		U	Double pane windows with reflective coating or glass. No drafts or wind leaks around windows. No evidence of moisture damage. No obvious evidence of sun damage inside on carpet, drapes, floors by fading or discoloring.	10	Windows are double pane but feel cold or drafts exists. Slight moisture damage is evident. No solar reflective coating, just clear glass.	0	Single pane windows. The area around windows feels cold in winter and hot in the summer. Evidence of sun damage and fading is present.	0	10	E
6	Common	Building Exterior-Doors	Green	Exterior doors	U	No drafts or wind leaks around doors. Door feels warm in winter and cool in summer to the touch.	8	Small drafts and wind leaks that are not bad enough to warrant a red rating.	0	Drafts and wind leaks around doors. The area around the door is hot in the summer and cold in the winter.	0	8	E
			Amber	Water Efficency	U	Low flow fixtures		No Amber condition		Standard fixtures without water saving features.		8	E
15	Common	HVAC	Red	Cooling	U	High efficiency (SEER 16 or above), geothermal, solar, non traditional.	0	Conventional cooling but less than SEER 16 or marked on the unit. If SEER is not available, then no geothermal, solar, or non traditional cooling is used.	0	Thru the wall window units	10	10	E
			Green	Heating	U	Geothermal, solar, non traditional, or Energy Star, combined with backup electrical, gas, or oil	10	High efficiency (marked on unit)	0	Thru the wall window units, space heaters, furnace unit that is 5 years old or more.	0	10	E
			Red	Water Heating	U	Solar w/backup, heat pump, geothermal or tankless	0	High efficiency (marked on unit) storage tank. May be oil, gas, or electric	0	Standard tank water heater that is 5 years old or more. May be oil, gas, or electric	10	10	E
			Green	Controls	U	Green if any of the following are present: Automatic changeover and programmable. Is the heating and cooling system controlled by a Building Automation System (BAS) or an Energy Management System (EMS)? Is the Energy Star Logo or wording found on any part of the system?	8	Programmable thermostat	0	Non programmable thermostat	0	8	E
						Heavily insulated by observation. Difficult to		Medium insulation by observation. I can		Not observed or lightly insulated. I can feel			

Questions?